

ABSTRACT OF THE DISCLOSURE

Disclosed are a projection exposure apparatus and a device manufacturing method using the same, in which a pattern of a reticle illuminated with laser light from a continuous emission excimer laser is projected on a substrate by use of a projection optical system. The projection optical system comprises a lens system made of a substantially single glass material. There is a pulse emission laser provided, for injecting pulse light into the continuous emission excimer laser, for injection locking. This structure assures accurate projection of the reticle pattern, while enabling improvements of the throughput.